



VCE PSYCHOLOGY 2011

YEAR 12 TRIAL EXAM UNIT 3

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Time allowed: 90 minutes

Total marks: 90

Section A – Multiple Choice Questions 44 marks

Section B – Short Answer Questions 36 marks

Section C – Extended Response Question 10 marks

An Answer Sheet is provided for Section A.

Answer all questions in Section B & C in the space provided.

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Student Name.....

VCE Psychology 2011 Year 12 Trial Exam Unit 3

Student Answer Sheet

There are 45 Multiple Choice questions to be answered by circling the correct letter in the table below. Use only a 2B pencil. If you make a mistake, erase and enter the correct answer. Marks will not be deducted for incorrect answers.

<i>Question 1</i>	A	B	C	D	<i>Question 2</i>	A	B	C	D
<i>Question 3</i>	A	B	C	D	<i>Question 4</i>	A	B	C	D
<i>Question 5</i>	A	B	C	D	<i>Question 6</i>	A	B	C	D
<i>Question 7</i>	A	B	C	D	<i>Question 8</i>	A	B	C	D
<i>Question 9</i>	A	B	C	D	<i>Question 10</i>	A	B	C	D
<i>Question 11</i>	A	B	C	D	<i>Question 12</i>	A	B	C	D
<i>Question 13</i>	A	B	C	D	<i>Question 14</i>	A	B	C	D
<i>Question 15</i>	A	B	C	D	<i>Question 16</i>	A	B	C	D
<i>Question 17</i>	A	B	C	D	<i>Question 18</i>	A	B	C	D
<i>Question 19</i>	A	B	C	D	<i>Question 20</i>	A	B	C	D
<i>Question 21</i>	A	B	C	D	<i>Question 22</i>	A	B	C	D
<i>Question 23</i>	A	B	C	D	<i>Question 24</i>	A	B	C	D
<i>Question 25</i>	A	B	C	D	<i>Question 26</i>	A	B	C	D
<i>Question 27</i>	A	B	C	D	<i>Question 28</i>	A	B	C	D
<i>Question 29</i>	A	B	C	D	<i>Question 30</i>	A	B	C	D
<i>Question 31</i>	A	B	C	D	<i>Question 32</i>	A	B	C	D
<i>Question 33</i>	A	B	C	D	<i>Question 34</i>	A	B	C	D
<i>Question 35</i>	A	B	C	D	<i>Question 36</i>	A	B	C	D
<i>Question 37</i>	A	B	C	D	<i>Question 38</i>	A	B	C	D
<i>Question 39</i>	A	B	C	D	<i>Question 40</i>	A	B	C	D
<i>Question 41</i>	A	B	C	D	<i>Question 42</i>	A	B	C	D
<i>Question 43</i>	A	B	C	D	<i>Question 44</i>	A	B	C	D

VCE Psychology 2011 Year 12 Trial Exam Unit 3

SECTION A – Multiple Choice

Question 1

Daydreaming is considered to be an ASC and is where attention is shifted away from external stimuli to an inner private reality. Daydreams are

- A. associated with many eye movements and low levels of alpha brain waves.
- B. associated with few eye movements and high levels of alpha brain waves.
- C. associated with many eye movements and high levels of beta brain waves.
- D. associated with few eye movements and high levels of beta brain waves.

Question 2

Which of the following is **not** thought to be a benefit of daydreaming? It

- A. blocks out information you consider to be irrelevant.
- B. reduces tension of unfulfilled wishes and needs.
- C. facilitates problem solving.
- D. enables an individual to stay mentally alert in a boring situation.

Question 3

Emma is sitting in her literature class, and she looks pale and is feeling cold. After class, her teacher asks if she is feeling alright. Emma replies that everything is good and that she is just tired. Emma is giving a _____ in terms of her response to the teacher, and this is highly _____ in nature.

- A. self report, subjective
- B. self report, objective
- C. quantitative report, subjective
- D. quantitative report, objective

Question 4

As you are completing this exam, your awareness is being focused on this question rather than the activities going on around you. This attribute of NWC is a characteristic of

- A. controlled processing.
- B. automatic processing.
- C. divided awareness.
- D. selective attention.

Question 5

When quality and pattern of mental functioning significantly change at any time, this is referred to as

- A. cognitive dissonance.
- B. a limited sense of normal waking consciousness.
- C. a progression into the unconscious.
- D. an altered state of consciousness.

Question 6

Sally has just gained her license and is concentrating on monitoring the road, steering the car, looking at road signs and the like. At this stage, she won't have the radio on or hold a conversation with others in the car. For Sally, driving can be considered

- A. an automatic process as it involves higher levels of awareness and focused attention.
- B. an automatic process as it does not interfere with other tasks and is performed with little conscious effort and minimal attention.
- C. a controlled process, as it involves higher levels of awareness and focused attention.
- D. a controlled process, as it does not interfere with other tasks and is performed with little conscious effort and minimal attention.

Question 7

Paisley can become very anxious and agitated at times. As a result she visited her doctor, who recommended meditation. While practising one night, Paisley used a mantra and controlled breathing. Of the following, which was Paisley most likely to experience?

- A. Clear, logical thought.
- B. A lowered pain threshold.
- C. Improved control of her emotions.
- D. A distorted sense of time.

Question 8

Referring to question 7 above, EEG patterns associated with Paisley and her meditation techniques would most likely have a _____ amplitude and a _____ frequency.

- A. high, low
- B. low, low
- C. medium high, irregular
- D. low-medium, relatively high

Question 9

Alex snores terribly while sleeping. His wife refers him to a sleep laboratory in an attempt to help him. Among a number of measures, the researchers monitor the changes of electrical activity in his muscles. To do this the researcher would be using a device called an

- A. electro-oculargraph.
- B. electromyograph.
- C. electrocardiograph.
- D. electroencephalograph.

Question 10

During sleep, brainwave recordings indicate that the brain

- A. changes in its pattern of activity.
- B. shuts down, showing very little activity.
- C. shows a general increase in beta waves.
- D. shows a general decrease in delta waves as sleep gets heavier.

Question 11

Jay Normus is in a sleep laboratory and is woken during a period of REM sleep. The activity of the brain associated with REM sleep

- A. shows low frequency and high amplitude.
- B. shows how emotional the subject is.
- C. is very much like recordings of subjects who are wide awake.
- D. indicates strong alpha rhythms.

Question 12

Research shows that individuals who suffer from mild REM sleep deprivation will most likely experience

- A. total lack of memory during the affected period.
- B. even less REM sleep in subsequent nights.
- C. irritability, lack of concentration, and difficulties in performing simple tasks.
- D. hallucinations and delusional behaviour.

Question 13

An experiment is used to test a cause-effect relationship between variables under controlled conditions. Which of the following is the best example of a cause – effect relationship?

- A. Whether the variable of anxiety has an effect on the variables of exam performance.
- B. Whether the variable of attending football matches has an effect on the variable of intelligence.
- C. Whether the variable of hand size has an effect on the variable of sleeping patterns.
- D. Whether the variable of hours spent watching television has an effect on the variable of driving ability.

Question 14

A confounding variable is one that

- A. along with the I.V. indicates the direction of the D.V.
- B. increases the likelihood of the results occurring due to chance.
- C. almost makes it impossible to determine which of the variables has produced a change in the dependent variable.
- D. doesn't exist in experimental research.

Question 15

The cerebral hemispheres are

- A. nerve tissue that connects the left and right sides of the brain.
- B. two almost symmetrical brain structures that appear to be separated by a deep groove.
- C. areas of the brain associated with different structures and functions.
- D. areas that process information about voluntary bodily movements.

Question 16

Which of the following is **not** true regarding the primary somatosensory cortex?

- A. The right somatosensory cortex receives information regarding temperature from the right side of the body.
- B. The somatosensory cortex enables you to feel a burn from steam on your arm.
- C. The somatosensory cortex indicates the position of your hands when you are about to catch a ball.
- D. The somatosensory cortex would register information letting you know whether your shoes had been tied too tightly.

Question 17

Within hemispheric specialisation, an example of an "analytical function" would be

- A. blinking when dust goes in your eye.
- B. walking in to JB Hi-Fi and impulse buying a stereo.
- C. falling asleep when exhausted.
- D. formulating a plan to save enough money to buy a car.

Question 18

Picasso is riding his motorcycle to work along a major, busy road. Before he can respond, a car moves in front of him causing Picasso to swerve and hit a fence. As Picasso was not wearing a helmet he suffered severe brain trauma especially to the reticular activating system. This would most likely cause Picasso to experience

- A. difficulty in viewing moving objects.
- B. difficulty performing tasks that require quick reflexes.
- C. loss of appetite.
- D. profound disruptions to his sleep/waking cycle.

Question 19

The part of the brain that enables the sense of sight to be relayed to the visual cortex is the _____. The only sense that this structure does not relay is the sense of _____.

- A. thalamus, touch
- B. thalamus, smell
- C. somatosensory cortex, touch
- D. somatosensory cortex, smell

Question 20

Jimmy is in hospital being tested for a particular brain disorder. In one test they ask Jimmy to read the words football and clockwise. Jimmy responds by saying "ball" and "wise". In test two, he is asked to draw a clock, and although Jimmy draws the circle correctly, he puts all the numbers onto the right hand side of the clock only. The doctor's believe that Jimmy is suffering from _____, which is caused by damage to the _____.

- A. Wernicke's Aphasia, left temporal lobe
- B. Broca's Aphasia, left frontal lobe
- C. spatial neglect, right parietal lobe
- D. amnesia, thalamus

Question 21

Single Photon Emission Computed Tomography (SPECT) is a variation of PET, yet differs in certain technological features. A major difference between SPECT and PET is that

- A. SPECT images have a lower resolution and are therefore not as clear or detailed as PET images.
- B. SPECT uses a shorter lasting radioactive tracer.
- C. SPECT is not functional in nature and is purely anatomical.
- D. SPECT can only construct two dimensional images of brain regions.

Question 22

Dylan is an electrician and is working in the attic of a client's house installing some down lights. Whilst concentrating on his work, Dylan feels something crawling on his leg. He immediately moves his hand in an attempt to brush off the offending bug. The nervous system that enabled Dylan to sense and respond to the bug is referred to as the

- A. Central Nervous System.
- B. Parasympathetic Nervous System.
- C. Autonomic Nervous System.
- D. Somatic Nervous System.

Question 23

In terms of memory, retrieval could best be defined as

- A. the process of converting information into a useable form.
- B. the process of locating and recovering the stored information from memory so that we are consciously aware of it.
- C. the process of locating and recovering the stored information from sensory memory.
- D. the process of transferring information from short term memory to long term memory.

Question 24

Doctor Brayne is discussing the symptoms that a patient has been experiencing in his surgery. Dr Brayne then remembers another patient from a few days ago with similar symptoms. He links the two pieces of information together in order to create a better picture of what his current patient may be suffering from. In doing so, Dr Brayne is more specifically using

-
- A. chunking
 - B. maintenance rehearsal
 - C. consolidation rehearsal
 - D. elaborative rehearsal

Question 25

Nathan is watching the 2010 Commonwealth Games on television. He witnesses Geoff Huegill's gold medal in the 100m butterfly event. When he hears Advance Australia Fair, at the medal ceremony it takes him back to his last day in Year Twelve at his final assembly when he sang the song. He feels a deep pride in being Australian and brings to mind the great feats that past Australians have been involved in. According to Craik and Lockhart's levels of processing framework, Nathan would be experiencing _____ processing.

- A. shallow
- B. intermediate
- C. deep
- D. indefinite

Question 26

According to Baddeley and Hitch's model of working memory, which of the following is **not** true regarding the function of the episodic buffer?

- A. It is a subsystem of working memory that enables the different components of working memory to interact with long term memory.
- B. It is assumed to be a limited capacity temporary storage system that holds about four chunks of information.
- C. It is under the control of the central executive.
- D. It is capable of only holding information from the visuo-spatial sketchpad.

Question 27

American psychiatrist Eric Richard Kandel identified changes in the structure and functioning of the neurons in the brain by studying a large sea slug found along the coast of California.

Kandel's research findings indicate

- A. that any experience resulting in a memory produces physical changes within the brain at a neuronal level, therefore strengthening connections between the actual neurons involved in the process and improving communication between the neurons.
- B. that any experience resulting in a memory produces chemical changes within the brain at a neuronal level, therefore strengthening connections between the actual neurons involved in the process and improving communication between the neurons.
- C. that any experience resulting in a memory produces physical changes within the brain at a neuronal level, therefore weakening connections between the actual neurons involved in the process and inhibiting communication between the neurons.
- D. that any experience resulting in a memory produces chemical changes within the brain at a neuronal level, therefore weakening connections between the actual neurons involved in the process and inhibiting communication between the neurons.

Question 28

Dementia is said to be a neurodegenerative disease. Which of the following is **not** true regarding dementia?

- A. A person with dementia often experiences memory loss.
- B. A decline in intellectual ability is a common symptom seen in dementia sufferers.
- C. Dementia is considered to be a normal part of the aging process as it affects many Australians.
- D. People with dementia often suffer from poor social skills and abnormal emotional reactions.

Question 29

Research into the effects of aging on short term and long term memory has revealed that

- A. STM is affected by age if the task is considered difficult.
- B. STM is affected by age if the task is considered easy.
- C. procedural memories stored in long term memory are forgotten before episodic memories.
- D. procedural memories stored in STM are forgotten at the same rate as episodic memories that are stored in STM.

Question 30

In using nonsense syllables to test forgetting, Ebbinghaus was able to

- A. establish a cause-effect relationship in regards to the forgetting curve.
- B. avoid the potential influence of past experience on the information being learned.
- C. test possible new words to be incorporated into the English language.
- D. show the potential influence of past experience on the information being learned.

Question 31

Why is relearning also called the "method of savings"?

- A. Because as you relearn you establish more meaningful links with similar concepts.
- B. Because as you have already learnt material in the past, you don't need to revise it at a later date.
- C. Because retrieval is faster within relearning.
- D. Because it can be used to measure the amount of information "saved" from previous learning.

Question 32

Of the following, which is the best example of free recall?

- A. Name the last three countries to hold the Olympic Games in order from the most recent to the least recent.
- B. Name the last three countries to hold the Olympic Games.
- C. Name the last three countries to hold the Olympics. Their initials are: A, G and C.
- D. Name the last three countries to hold the Olympic Games from the following list: England, China, Sweden, Greece, India and Australia.

Question 33

Babbitt goes to her school reunion at James Bond Secondary College. In talking with some of her friends, the question is raised as to how each person felt in transitioning from Primary School to Secondary School. Babbitt could not remember, and being a psychologist blamed it on Decay theory. Decay theory suggests that

- A. the retrieval cues being used are not appropriate.
- B. physical brain damage occurred while the memory was being formed.
- C. a memory trace fades over time through disuse.
- D. a memory has never been created.

Question 34

Professor Sponge is conducting an experiment in how interference relates to the access of memory. Prior to the experiment, Professor Sponge identified potential extraneous variables that may be expected to affect the DV. He then redesigned the experiment in order to try to eliminate the effect of such variables. The reason Professor Sponge redesigned the experiment was

- A. to make sure that there would be no confounding variables.
- B. so that descriptive statistics could be used in order to interpret the results.
- C. to determine the affect of any placebo that was to be administered.
- D. to eliminate the experimenter effect.

Question 35

Professors Wilson and Diston are undertaking research as to whether increased anxiety prior to examination periods result in higher forgetting rates than Ebbinghaus found in his research. At the end of their research they published their results including a detailed generalization. A generalization from research involves

- A. stating whether the results support or do not support the hypothesis.
- B. taking the findings from a sample and being able to apply them to a relevant population.
- C. making sure that the research is statistically significant.
- D. obtaining a number of measures of central tendency, including mean, median and mode.

Question 36

Tip of the Tongue (TOT) occurs when you are aware of knowing something, and confident that you will eventually remember it, but you are not able to retrieve it from memory at that point in time. Research into TOT is important as it has illustrated several aspects of the retrieval process. Which of the following is **not** supported by this research?

- A. It seems that retrieving information is not an all-or-nothing process.
- B. In many instances information is stored in long term memory but is not accessible without the right retrieval cue.
- C. Retrieval of information from LTM must be in concepts according to meaning.
- D. Information stored in long term memory is organized and connected in relatively logical ways.

Question 37

Mr Henderson is a school teacher and while shopping at Chadstone Shopping Centre is approached by a past student and they begin chatting. Mr Henderson struggles to remember the student's name, however a week later when the past student drops in to school to see him, he recalls her name effortlessly. This is an example of

- A. state dependent cues.
- B. Tip of the Tongue Phenomenon.
- C. recognition.
- D. context dependent cues.

Question 38

Little Farrarr is only 5 years old. Her father is trying to teach her the directions on a compass. He explains to her that an easy way to remember them is by taking the first letter of each direction (North, East, West and South) and forming a new word (news). In this case the word "news" is considered to be an

- A. acronym.
- B. acrostic.
- C. acoustic.
- D. anagram.

Question 39

Mick Jagger is going to music classes. In his first lesson he is told the phrase "every good boy deserves fruit". The first letters of each of these words form the names of the musical notes on the lines of a staff (EGBDF). In this case, the phrase is considered to be an

- A. acronym.
- B. acrostic.
- C. acoustic.
- D. anagram.

Question 40

The first person to scientifically study forgetting was psychologist Hermann Ebbinghaus. Ebbinghaus wished to measure

- A. whether nonsense syllables were more difficult to remember than everyday words.
- B. the amount of information retained and the rate at which it was forgotten.
- C. the differences in retention rates between men and women.
- D. all of the above.

Question 41

According to the serial position effect, items located at the end of a list are _____ to recall. This is referred to as the _____ effect.

- A. easier, recency.
- B. harder, recency.
- C. easier, primacy.
- D. harder, primacy.

Question 42

Of the following, which supports evidence of consolidation theory?

- A. After being knocked unconscious Brian couldn't remember what happened.
- B. Brian doesn't study therefore he doesn't know the answers.
- C. Brian can only remember where he has placed his car keys when drunk.
- D. Brian struggles to remember his French verbs after learning his Italian verbs.

Question 43

Georgia has just completed a practice psychology exam paper. Upon receiving her result of 35/90, she consciously decides that the result isn't worth remembering because she hadn't really studied the course sufficiently at that stage. Therefore, she blocks it from her mind.

Georgia is exhibiting

- A. repression.
- B. motivated forgetting.
- C. suppression.
- D. both A and B.

Question 44

Numerous studies on eyewitness testimony by Loftus and others, have found that memories of eyewitnesses are _____ of the events witnessed.

- A. exact replicas
- B. accurate versions
- C. unreliable versions
- D. reconstructions

End of Section A

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SECTION B – Short Answer Questions

Question 1

Professor Morris is researching the effects of caffeine on sleep at Beamo Secondary College. The school has quite a diverse multicultural population, with varying numbers of students within each ethnic group.

- a. What sampling method would Professor Morris need to apply to his research in order to control the participant variable of student ethnicity?

(1 mark)

- b. Briefly explain what Professor Morris would need to do.

(2 marks)

Question 2

What is the role of the Central Nervous System?

(2 marks)

Question 3

What is the relationship between the Central Nervous System and the Peripheral Nervous System?

(1 mark)

Question 4

Give an example to highlight how a sensory neuron would function.

(1 mark)

Question 5

In reference to your adrenal glands, your parasympathetic nervous system would _____ hormone secretion.

(1 mark)

Question 6

The use of self-reports in helping to diagnose sleep disorders or disturbances can be important. Often a sleep diary or sleep log may be used. Name three pieces of information that could be recorded in a sleep diary to be of benefit in any diagnosis.

(3 marks)

Question 7

Explain Rene Descartes theory of dualism?

(2 marks)

Question 8

Alcohol is classified as a depressant, and its specific effects on consciousness can depend on many variables. Using psychological terminology, state two ways in which alcohol may affect consciousness.

(2 marks)

Question 9

Explain the function of the thalamus during the process of sleep.

(1 mark)

Question 10

According to Craik and Lockhart's levels of processing framework, explain why elaborative rehearsal is more effective than maintenance rehearsal.

(2 marks)

Question 11

Recall, recognition and relearning differ in their relative sensitivity as a measure of retention. Relearning is often described as the most sensitive measure of retention. What does this mean?

(2 marks)

Question 12

In 1932 British psychologist Frederick Bartlett believed that Ebbinghaus studied memory in an artificial way. Explain what Bartlett meant by this, and state how his research overcame the weakness he saw in Ebbinghaus' work.

(2 marks)

Question 13

Giving an example, explain what a "leading" question is, in terms of Loftus' research.

(2 marks)

Question 14

Using an example for each, explain the difference between the terms "experimenter effect" and "experimenter bias".

(4 marks)

Question 15

According to Baddeley and Hitch's model of working memory, the _____ is a limited capacity temporary storage system that holds approximately _____ bits of information. It is capable of combining auditory and _____ information, and connects all of the subsystems with _____.

(4 marks)

Question 16

In terms of state dependent cues, explain why a person who learns information under the influence of marijuana may recall the information more easily when under the influence of marijuana.

(2 marks)

Question 17

Doctor Sutherland is testing whether gluten free food products eaten regularly contribute to the feeling of less bloating and fewer stomach complaints. After 6 months of research, her statistical analysis shows a result of $p > 0.05$. What does this p value indicate, and what conclusions can be drawn from her research?

(2 marks)

End of Section B

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SECTION C – Extended Response Question

Question 1

Jayne has returned to netball training and has completed an extremely intensive, physical workout. She comes home and after tea, works until 11:00pm on a Psychology SAC, after which she goes to bed. In terms of Jayne's day, describe the sleep pattern that she would go through during the night. In your answer explain how the physiological patterns of REM sleep differ from the other stages of sleep. Explain how an EEG and EOG can be used to determine whether a person is experiencing REM sleep.

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There are no margins, text, or other markings on the page.

(10 marks)

End of Trial Exam

Suggested Answers

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SECTION A – Multiple Choice Answers

1. B	2. A	3. A	4. D	5. D	6. C	7. D	8. D	9. B	10. A	11. C
12. C	13. A	14. C	15. B	16. A	17. D	18. D	19. B	20. C	21. A	22. D
23. B	24. D	25. C	26. D	27. A	28. C	29. A	30. B	31. D	32. B	33. C
34. A	35. B	36. C	37. D	38. A	39. B	40. B	41. A	42. A	43. C	44. D

SECTION B – Short Answer (Answers)

Question 1

- a. Stratified Sampling (**1 mark**).
- b. While still using random sampling, each ethnic group would need to be represented (**1 mark**). The ethnic groups would need to be represented in the same proportions as they occur in the school population (**1 mark**).

Question 2

To coordinate and integrate all incoming neural information (**1 mark**) and to start any messages that are to be sent to the various parts of the body (**1 mark**).

Question 3

The CNS relies on the PNS to provide information about both the external/internal environments and to carry messages from the CNS to various parts of the body (**1 mark**).

Question 4

As sensory neurons carry information from sensory organs, muscles and internal organs to the CNS, something similar to "feeling the sensation of a cold spoon in your hand" (**1 mark**).

Question 5

Inhibit (**1 mark**).

Question 6

Any 3 of the following for (**1 mark**) each:

Time when trying to fall asleep, time when sleep occurred, number of awakenings, time of awakenings, duration of awakenings, time of waking up in the morning, time of getting up, recording of naps during the day, alcohol consumption, medication, exercise, caffeine intake etc.

Question 7

He believed that the mind is a non physical spiritual entity, whereas the body is made up of flesh and matter (**1 mark**). They both come in to contact through the pineal gland, enabling the mind and brain to interact, producing thoughts, sensations, feelings etc (**1 mark**).

Question 8

Any two of the following for **(2 marks)**:

A shortened attention span, impaired perceptions, impaired thinking, impaired memory, deterioration in performing complex tasks, slower reaction times, reduced self awareness, problems with voluntary muscular control and fine movements, impaired emotional awareness, impaired perception of time, diminished self control and other similar answers.

Question 9

The thalamus inhibits/closes the pathways of incoming sensations, therefore information doesn't pass through to the brain, allowing it rest and recovery **(1 mark)**.

Question 10

Information will be retained only briefly if processed at a **shallow** level, but retained much longer if processed at a **deeper** level. **(1 mark - terms shallow and deeper must be used)**. Elaborative rehearsal involves deep processing as meaning is given to the information which makes it more relevant **(1 mark)**.

Question 11

The sensitivity of a measure of retention refers to its ability to assess the amount of information that has been stored in memory **(1 mark)**. Relearning is the most sensitive as it can detect information that has been learned and stored in memory at some stage in the past **(1 mark)**.

Question 12

Bartlett believed that by using nonsense syllables, Ebbinghaus ignored important variables such as the influence of prior experience, which play a part in everyday human memory. **(1 mark)** Bartlett had participants read a story/essay or look at a picture. They would then be asked to recall/describe the passage/picture **(1 mark)**.

Question 13

A leading question is a question where the content, or the way in which the question is phrased, may suggest what answer is desired, or lead to the desired answer **(1 mark)**. For example "When you came out of the garage at 10:00pm did you see the brown-haired man?" **(1 mark for a similar example)**.

Question 14

Experimenter effect occurs when there is a change in a participant's response due to the experimenter's expectations, biases or actions, rather than to the effect of the IV **(1 mark)**. For example, a researcher may accidentally smile at participants in one group but not at those in another **(1 mark for a similar example)**. Experimenter bias is the unintentional biases of the experimenter in the collection and treatment of data **(1 mark)**. For example, the experimenter may misread data or misinterpret a participant's verbal response **(1 mark for a similar example)**.

Question 15

Episodic buffer, four, visual, long term memory **(4 marks)**.

Question 16

It can produce an internal state with unique psychological and physiological characteristics, many aspects of which become encoded with the new memories, therefore providing additional retrieval cues that assist recovery of information from memory **(1 mark)**. State dependent retrieval involves better recall of information as the physiological and/or psychological states of learning and retrieval match **(1 mark)**.

Question 17

A p value of greater than 0.05 suggests that there is a greater than 5% chance that the results of the experiment are due to chance and not the IV **(1 mark)**. No conclusions can be drawn **(1 mark)**.

SECTION C – Extended Response Answer

Question 1

Most adults sleep for around 8 hours, progressing through sleep cycles every 90 minutes **(1 mark)**. The deeper sleep (NREM stages 3+4) tends to occur earlier in the sleep cycle, while periods of REM sleep occur approximately every 90 minutes **(1 mark)**. The duration of REM sleep progressively increases as the night continues, starting at around 10 minutes and ending with around 30 minutes. Deeper sleep decreases as the night continues **(1 mark)**. Due to Jayne's intensive physical workout, students need to comment that more time will be spent in NREM sleep, due to the physical nature of her day and the body's need to repair **(1 mark)**. The physiological patterns of REM sleep differ in the following ways from other stages of sleep:

Erratic, high frequency/low amplitude brain activity similar to being awake **(1 mark)**.

Increased electrical activities of the muscles surrounding the eye **(1 mark)**.

Very little electrical activity in body muscles (atonia) **(1 mark)**.

An increase in a number of physiological functions, such as breathing, heart rate etc **(1 mark)**.

To determine whether a person is experiencing REM sleep, an EEG and an EOG can be used. As the brain gives off tiny electrical signals indicating separate stages of sleep, the EEG amplifies and records these signals, allowing identification of a particular strength of signal indicating a particular stage of sleep **(1 mark)**. The eye is similar to a small battery with both negative and positive charges. Electrodes placed on the skin near the eye (EOG) record the change between the positives and negatives as the eye rotates in its socket, therefore identifying the amount of movement of the eye and therefore a particular stage of sleep **(1 mark)**.

End of Suggested Answers